Full-Stack Engineer Code Evaluation

Overview

This is a code evaluation for the full-stack engineer position. It is intended to give us a sense of your technical capabilities and problem-solving approach. You will have four hours to complete the evaluation and will be reimbursed $180 for your time.

It isn't mandatory that you finish every piece of the implementation — we've deliberately chosen a task we believe is possible to accomplish in that amount of time, but is challenging! If you only get part way through, that's fine! We're interested in seeing what you prioritize and how you go about designing a small app from start to end.

You may use whatever libraries and frameworks you deem necessary. If you need some guidance, internally we typically use Vue.js or React for front-end frameworks and Node (Koa, Express) or Django on the backend. Choosing these tools or the associated languages in particular is not necessary for this evaluation, however.

The Project

We'd like you to build a small note-taking web application that supports the following user stories:

- Adding bullet points

- Adding text to bullet points

- Nesting bullet points indefinitely (a bullet may have any number of nested children, which in turn may have any number of nested children, etc.)

- Removing bullets (by deleting content using backspace or delete)

- The ability to mark a bullet as "done" (strikethrough effect)

- Expanding and collapsing bullets, which shows and hides nested content

- Being able to click on a bullet to temporarily scope the app to only that bullet

- Being able to go back in the scope hierarchy using a back button

- Being able to filter visible bullets using an exact match by typing into a provided text input

- Persisting this content in the backend and exposing a thoughtfully designed API for use by the front-end

  - The mode of storage is up to you, but a scalable solution is preferred

- Changes should be saved asynchronously

This is essentially a pared down version of this site: https://workflowy.com/demo/embed/

Please let us know if you have any questions! We'll be on-hand to respond to anything that might be unclear.